

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-5. (canceled).

6. (currently amended): ~~An~~ A Raman-active optical fiber having a core with ~~an~~ a higher refractive index and a cladding with a lower refractive index, said core comprising a multi-component oxide glass composition comprising:

a glass former component made of SiO_2 having a concentration of between 30 and 90 mol%; and

two Raman-active components of Li_2O and Nb_2O_5 in a concentration of up to 50 mol% in total;

wherein said Raman-active optical fiber has areas comprising LiNbO_3 crystallization particles induced by heat treatment of the fiber.

7. (currently amended): A fiber according to claim 6, wherein said ~~inner~~ cladding is made of silicate glass.

8-10. (canceled).

11. (new): A fiber according to claim 6, wherein said multi-component oxide glass composition further comprises at least one glass modifier component of alkaline or earth-alkaline in a concentration of up to 40 mol%.

12. (new): A fiber according to claim 11, wherein said glass modifier component is selected from the group consisting of Li_2O , Na_2O , K_2O , Rb_2O , Cs_2O , BeO , MgO , CaO , SrO , BaO .

AMENDMENT

U.S. Appln. No. 10/617,212

13. (new): A fiber according to claim 6, wherein said multi-component oxide glass composition further comprises at least one other oxide component selected from the group consisting of P_2O_5 , B_2O_3 , Al_2O_3 , Ta_2O_5 , V_2O_5 , As_2O_3 , GeO_2 , TiO_2 , ZrO_2 , PbO , Bi_2O_3 , Mo_2O_3 , WO_3 , SnO_2 , Sb_2O_3 , Ga_2O_3 , In_2O_3 , TeO_2 in a concentration of up to 40 mol%.

14. (new): A fiber according to claim 6, wherein said multi-component oxide glass composition further comprises at least one sulfide component.

15. (new): A Raman amplifier or laser, comprising a pump source coupled to a Raman-active optical fiber,

said Raman-active optical fiber having a core with a higher refractive index and a cladding with a lower refractive index, and

said core comprising a multi-component oxide glass composition comprising:

a glass former component made of SiO_2 having a concentration of between 30 and 90 mol%; and

two Raman-active components of Li_2O and Nb_2O_5 in a concentration of up to 50 mol% in total.

16. (new): A Raman amplifier or laser according to claim 15, wherein said cladding is made of silicate glass.

17. (new): A Raman amplifier or laser according to claim 15, wherein said Raman-active optical fiber has areas comprising $LiNbO_3$ crystallization particles induced by heat treatment of the fiber.

18. (new): A Raman amplifier or laser according to claim 15, wherein said multi-component oxide glass composition further comprises at least one glass modifier component of alkaline or earth-alkaline in a concentration of up to 40 mol%.

19. (new): A Raman amplifier or laser according to claim 18, wherein said glass modifier component is selected from the group consisting of Li_2O , Na_2O , K_2O , Rb_2O , Cs_2O , BeO , MgO , CaO , SrO , BaO .

AMENDMENT

U.S. Appln. No. 10/617,212

20. (new): A Raman amplifier or laser according to claim 15, wherein said multi-component oxide glass composition further comprises at least one other oxide component selected from the group consisting of P_2O_5 , B_2O_3 , Al_2O_3 , Ta_2O_5 , V_2O_5 , As_2O_3 , GeO_2 , TiO_2 , ZrO_2 , PbO , Bi_2O_3 , Mo_2O_3 , WO_3 , SnO_2 , Sb_2O_3 , Ga_2O_3 , In_2O_3 , TeO_2 in a concentration of up to 40 mol%.

21. (new): A Raman amplifier or laser according to claim 15, wherein said multi-component oxide glass composition further comprises at least one sulfide component.